# An RCT of an Internet-based Therapist-assisted Self-management treatment for PTSD

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# Background

- ♠ **Most people adapt sufficiently to trauma**
- ♠ **No proven primary prevention of PTSD**
- ♠ **Early PTSD recognition & management is critical**
- ♠ **RCTs of early interventions are limited**
- ♠ **No published RCTs of early intervention for mass violence**

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# Background

- Good evidence for CBT as secondary prevention
- Requires experts in specialty care settings
- Treatments are multi-session, therapist-intensive, and potentially burdensome to organization & patients
- CBT is not widely used
- Does not meet a public health agenda

# Hypothesis

**An Internet-based therapist assisted self-management treatment reduces PTSD symptoms in individuals with PTSD presenting in the context of disaster and war**

# Study Design

- ♠ **Randomized controlled trial**
- ♠ **Two parallel arms with 3 and 6 month follow-up**
- ♠ **Both intervention arms Internet-based & therapist assisted**
- ♠ **Self-management CBT (SM-CBT) vs. supportive counseling (SC)**
- ♠ **2 hour face-to-face session, followed by self-directed, self-paced, self-help**
- ♠ **8 weeks of daily homework prompted, promoted, and monitored over the web**
- ♠ **Participants logon daily to report symptoms, report progress, and receive instructions**

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# Method

♠ <u>Participants</u>: PTSD related to military trauma

♠ <u>Setting</u>: Walter Reed Army Medical Center

♠ <u>Follow-up</u>: Pre- and post-, 3-, & 6-months

♠ Participant raters blinded to treatment arm

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# Outcomes

♠ **<u>Primary</u>: PTSD symptom severity**

♠ **<u>Secondary</u>: symptom severity of…**

- **Depression**
- **High end-state functioning**

**Potential mediators…**

- **Program adherence**
- **Web use indicators**

# Initial face-to-face session

- ♠ **Rationale for program**
- ♠ **PTSD psychoeducation**
- ♠ **Treatment plan**
- ♠ **Breathing control technique (SM-CBT only)**
- ♠ **Progressive muscle relaxation (SM-CBT only)**
- ♠ **Cognitive reframing (SM-CBT only)**
- ♠ **Initial hierarchy generation & explanation and coping skills (SM-CBT only)**
- ♠ **Web introduction & homework instructions**

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# Self-management CBT

♠ **Tasks:**
- **Assessment**
- **Initial training**
- **Initial generation of trigger contexts**

♠ **Self-monitoring**
♠ **Hierarchy generation**
♠ **Skill acquisition**
- **adaptive self-talk**
- **deep diaphragmatic breathing**
- **progressive muscle relaxation)**

♠ **Coping skills applied to trigger cues**
♠ **Narrative + coping skills**
♠ **Relapse prevention**

# Supportive counseling

- ♠ **Focus on present day hassles & adversities**

- ♠ **Monitoring**
  **Empowering information**
  **Empathic feedback**
  **Venting**
  **Insight**
  **Making meaning**

# Web Features

- ♠ **Progress is monitored easily**
- ♠ **PRN and planned phone calls, e-mails**
- ♠ **Automatic notifications (e.g., if depression level is high)**
- ♠ **Automated progression with flexibility**
- ♠ **Data collection is seamless**
- ♠ **Automatic built-in praise**
- ♠ **Web usage data**

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# Measures

♠ <u>**Clinical Interview**</u>
- **PTSD Symptom Scale (PSS-I; Foa et al., 1993)**
- **Select modules of the SCID**

♠ <u>**Self-Report Measures**</u>
- **Demographic Form**
- **Alcohol Use Disorders Identification Test (AUDIT; Babor et al., 1989)**
- **Beck Anxiety Inventory (BAI; Beck & Steer, 1990)**
- **Beck Depression Inventory - 2nd Edition (BDI-2; Beck et al., 1996)**
- **Quality of Life Inventory (Frisch et al., 1992)**
- **Post-Traumatic Cognitions Inventory (PTCI; Foa, Ehlers, Clark, Tolin, & Orsillo, 1998)**
- **Inventory of Traumatic Grief (ITG; Prigerson et al, 1999).**
- **Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990)**
- **Psychosocial Adjustment to Illness Scale (Derogatis, 1986)**
- **SF-36 (Ware, Snow, & Kosinski, 1993)**
- **Social Support Questionnaire Short Form (SSQ-6; Sarason et al., 1986)**

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# Therapist burden

- ♠ **5 scheduled calls over 8 weeks**
- ♠ **~ 5 minutes each call**
- ♠ **Rarely did calls last >15 minutes**
- ♠ **e-mail ~1 per 2 wks**
- ♠ **e-mail flow typically minimal**

# Participant adherence

SC participants logon more, but view less, and spend less time…

♠ Mean SM-CBT = 12.2 min/day

♠ Mean            SC =    2.7 min/day

♠ Mean pages per visit SM-CBT>>SC

♠ Mean pages per visit SM-CBT = 4.3 pp

♠ Mean "Web days"=38.1 (68% of full course)

♠ Most did not logon daily, but SC>SM-CBT

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# Outcomes

- ♠ **46 randomized (23 per group)**
- ♠ **34 (74%) completed (17 per group)**
- ♠ <u>**ITT & completers**</u> **- significantly sharper symptom decline with time**
- ♠ <u>**For completers**</u> **- SM-CBT group had...**
  - **Lower PTSD interview scores (d=.95)**
  - **Lower depression (d=1.03) and anxiety (d=1.01)**
  - **Significantly improved high end state functioning (SM-CBT=29% vs. SC=0% post-tx & SM-CBT=33% vs. SC=0% at 6 months)**

# Online Symptom Ratings

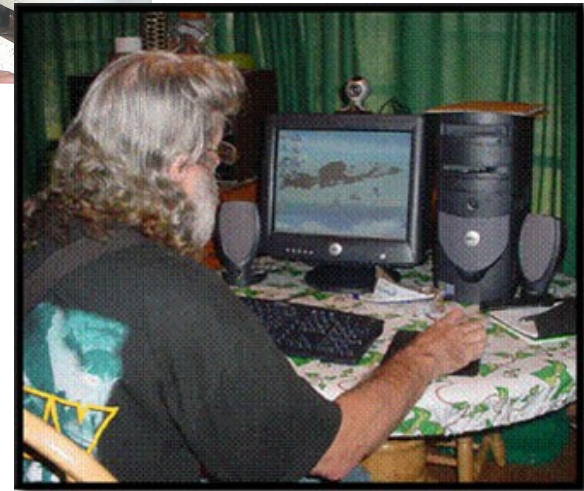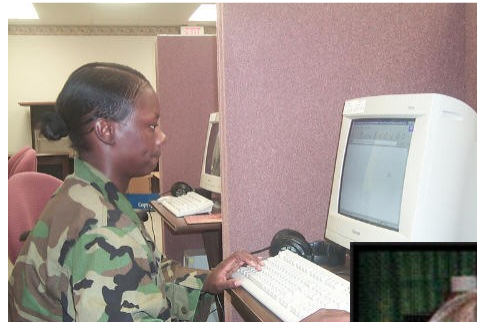**SM-CBT participants have significantly sharper decline in...**

♠ **Total PTSD symptom severity**

♠ **avoidance and hyperarousal symptoms**

♠ **global depression**

**...than SC participants**

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# In summary

- ♠ **Small trial, but big results!**
- ♠ **Clinically & statistically significant improvements in PTSD, depression, and high end state functioning**
- ♠ **Not a panacea – can't replace specialty care**
- ♠ **Next steps ---**

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Questions?